

AMENDMENTS TO THE CLAIMS (AS ON AMENDED SHEET ANNEXED TO IPER)

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) Soft and flexible surgical soft tissue mesh comprising polyethylene yarns, characterized in that the polyethylene yarns have a tensile strength of more than 1.0 GPa, determined as specified in ASTM D885M using a nominal gauge length of the fibre of 500 mm and a crosshead speed of 50%/min, consist of polyethylene with a relative viscosity of more than 5 dl/g as measured on a solution of polyethylene in decalin with a concentration of 0.05% at 135°C according to ASTM D 4020, and are sheath and core yarns having a weight ratio between the sheath and the core of below 5:1, wherein the core is formed by filaments that show no or only little adhesion to each other and the sheath is a substantially non-porous layer.

2. (original) Mesh according to claim 1, wherein the mesh is knitted.

3. (currently amended) Mesh according to claim 1 ~~or claim 2~~, wherein the yarns have a weight ratio between the sheath and the core of below 3:1.

4. (currently amended) Mesh according to ~~any of claims 1-3~~ claim 1, wherein the yarn comprises a medical drug.

5. (original) Method of producing a soft and flexible surgical soft tissue mesh comprising polyethylene yarns, characterized in that yarns are applied that comprise filaments made by:

a) spinning at least one filament from a solution of polyethylene with a relative viscosity of more than 5 dl/g, as measured on a solution of polyethylene in decalin with a concentration of 0.05% at 135°C according to ASTM D 4020, in a first solvent,

b) cooling the filament obtained to form a solvent-containing gel filament;

c) removing at least partly the solvent from the gel filament; and

d) drawing the filament in at least one drawing step before, during or after removing solvent, to result in a tensile strength of more than 1.0 GPa, determined as specified in ASTM D885M using a nominal gauge length of the fibre of 500 mm and a crosshead speed of 50%/min;

further comprising a step wherein the yarns are subjected to a heat treatment to form a modified yarn comprising a sheath and a core with a weight ratio between sheath and core at below 5:1, which sheath is substantially non-porous.

6. (original) Method according to claim 5. wherein the weight ratio is below 3:1.

7. (currently amended) Method according to claim 5 ~~or 6~~, wherein the heat treatment is performed in the presence of a second solvent for polyethylene.

8. (currently amended) Method according to ~~any one of claims 5-7~~ claim 5, further comprising a step of incorporating a medical drug into the yarns by adding the drug to the first or the second solvent.

9. (currently amended) Method according to ~~any one of claims 5-8~~ claim 5, further comprising a step of heating the mesh under constant strain at a temperature between the melting temperature of the polyethylene and a temperature not more than 20 degrees below the melting temperature.